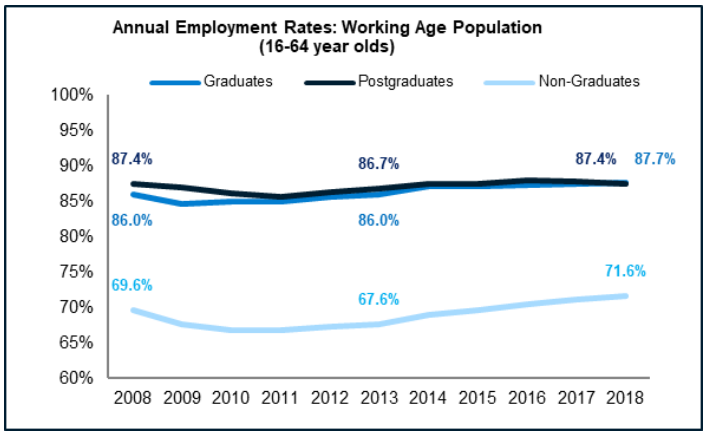
Department for Education

Graduate Labour Market Statistics 2018

25 April 2019

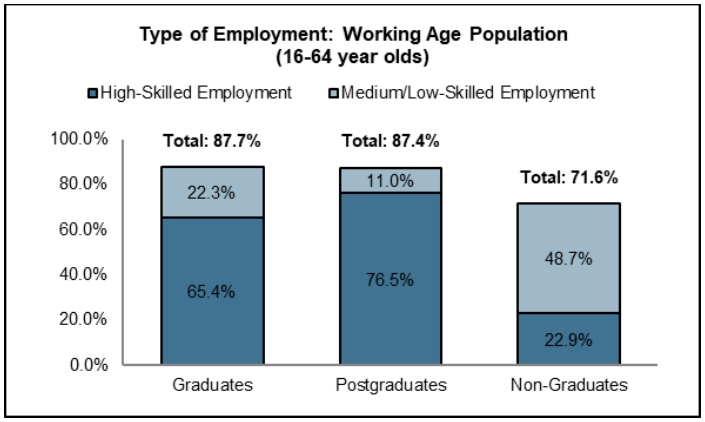
Annual Employment Rates (2008 – 2018)



In 2018 the graduate employment rate (87.7%) was marginally higher than the postgraduate rate (87.4%), and substantially higher than the employment rate of non-graduates (71.6%).

Trends since 2011 illustrate a rise in employment rates across all qualification groups. At 4.8 percentage points, this rise has been greatest amongst non-graduates and has resulted in a narrowing of the gap with graduates and postgraduates by 2.1 and 3.1 percentage points respectively.

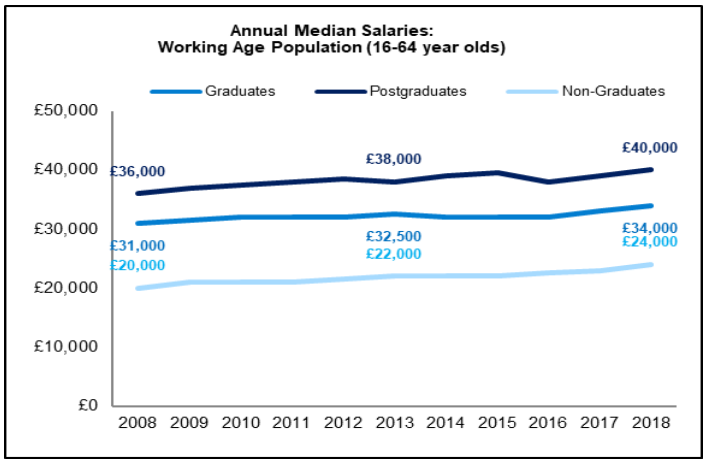
High Skilled Employment Rates (2018)



At 76.5%, the proportion of postgraduates employed in high-skilled roles in 2018 exceeded that of graduates (65.4%) and non-graduates (22.9%).

Conversely, across the three groups, non-graduates were most likely to be employed in medium/low-skilled roles (48.7%). The proportions for graduates and postgraduates were 22.3% and 11.0% respectively, 0.1 and 1.3 percentage points higher than in 2017.

Annual Median Salaries (2008 – 2018)



In 2018, the median graduate salary (£34,000) was £10,000 more than the median non-graduate salary (£24,000). Postgraduates earned an additional £6,000, with a median salary of £40,000. The differences between qualification groups are unchanged from 2017.

The 2018 figures represent a nominal increase of £3,000 for graduates and £4,000 for postgraduates and non-graduates respectively since 2008.

Contact: Email: he.statistics@education.gov.uk Press office: 020 7783 8300 Public enquiries: 0370 000 2288

Contents

1. Introduction 4
2. Headline Outcomes 5
3. Year-on-Year Changes 7
4. Time Series Data (2008-2018) 8
5. Graduate Breakdowns 10
6. Accompanying tables 13
7. Further information is available 14
8. Official Statistics 14
9. Technical information 14
10. Get in touch 15

About this release

This official statistical release summarises the annual employment and earning outcomes data for English domiciled graduates, postgraduates and non-graduates in 2018 using data from the Labour Force Survey (LFS). The publication focuses on two population bases: those aged 16-64 years old and 21-30 years old. In addition to the median outcomes data this publication also looks at how the employment and earnings outcomes of graduates varies by their specific characteristics. The breakdowns included are: age group, gender, ethnicity, disability status, degree class, subject group, occupation, sector of employment and region. Further data on these breakdowns can be found in the accompanying data tables.

As the results presented in the publication are based on survey data, they represent estimates. Therefore, any findings relating to differences or changes should be interpreted with caution as they may not necessarily be statistically significant. Further information on the methodology used and validity of the estimates can be found in the methodology note and supporting data. These have been published alongside the code and syntax used to generate all statistics within the GLMS on the gov.uk website.

GLMS only provides descriptive outcome measures based on survey data and does not control for the differences in characteristics between graduates, postgraduates and non-graduates. Therefore, the outcomes reported may not be wholly attributable to the particular qualification that an individual holds and could instead reflect other factors such as wider skills, experience or natural ability.

In this publication

The following figures and tables are included in this publication:

Figure 1: Employment, unemployment and inactivity rates of the working-age population

Figure 2: Employment, unemployment and inactivity rates of the young population

Figure 3: High-skilled employment rates of the working-age and young population

Figure 4: Median salaries of the working-age and young population

Table 1: Headline statistics and year-on-year changes

Figure 5: Time series data – annual employment rates

Figure 6: Time series data - annual High-skilled employment rates

Figure 7: Time series data – annual unemployment rates

Figure 8: Time series data – annual median Salaries

Figure 9: Median salaries of working-age graduates, postgraduates and non-graduates by gender

Figure 10: Median salaries of young graduates, postgraduates and non-graduates by gender

Figure 11: Median salaries of working-age and young graduates by gender and industry of employment

Underlying data - Graduate labour market statistics: 2018: supporting data

Microsoft Excel format (GLMS_2018_Supporting_Data.xlsx)

When reviewing the tables, please note that:

Labour Force Survey (LFS) datasets are routinely reweighted in line with population estimates. In 2018 a new weighting variable was introduced, PWT18, to LFS datasets from July - September 2012 onwards.

The accompanying quality and methodology information document provides information on the data sources, their coverage and quality, and explains the methodology used in producing the data.

1. Introduction

Graduate Labour Market Statistics (GLMS) compares the labour market conditions of English domiciled[1] graduates and postgraduates to those of English domiciled non-graduates. GLMS was first published by the Department for Business, Innovation and Skills (BIS) in December 2014, using data from the Labour Force Survey (LFS)[2]. Responsibility for English Higher Education policy, and hence this publication, transferred to the Department for Education (DfE) in summer 2016.

In this publication, 'graduates' are defined as those whose highest qualification is an undergraduate degree at Bachelor's level; 'postgraduates' are defined as those holding a higher degree (such as a Master's or PhD) as their highest qualification; and non-graduates are defined as those whose highest qualification is below undergraduate level (i.e. National Qualification Framework Level 5 or below)[3]. Employment and earnings outcomes are provided for the working-age (16-64 year olds) and the young (21-30 year olds) population groups. This publication also provides time series data from the past decade to provide further context to this year's headline statistics.

Since the results presented in the publication are based on survey data, they represent estimates. Therefore, any findings should be interpreted with caution as they may not necessarily be statistically significant. Further information on the methodology used and validity of the estimates can be found in the methodology note and supporting data. These have been published alongside the code and syntax used to generate all statistics within the GLMS on the gov.uk website.

This edition of the GLMS summarises the annual employment and earning outcomes data for graduates, postgraduates and non-graduates in 2018. In addition to median outcomes data, this publication also provides employment and earnings outcomes of graduates by their specific characteristics including: age group, gender, ethnicity, disability status, degree class, subject group, occupation, sector of employment and region.

Of note is that the GLMS only provides descriptive outcome measures based on survey data and does not control for the differences in characteristics between graduates, postgraduates and non-graduates. Therefore, the outcomes reported may not be wholly attributable to the particular qualification that an individual holds and could instead reflect other factors such as wider skills, experience or natural ability.

Labour Force Survey (LFS) datasets are routinely reweighted in line with population estimates. In 2018 a new weighting variable was introduced, PWT18, to LFS datasets from July - September 2012 onwards. Thus, results for the years mid-2012 to 2018 within this release have been calculated using the latest 2018 LFS weights. The results for the years prior to this have been calculated using the 2014 LFS weights. The effect of reweighting the 2018 results is typically negligible (less than 0.1 percentage points difference).

Links to all previous GLMS publications, supporting data and methodology notes can be found on the gov.uk website.

[1] "English domiciled" refers to individuals whose permanent home is in England.

[2] More information on the Labour Force Survey, including its user guide, can be found on the Office for National Statistics (ONS) website:
https://www.ons.gov.uk/surveys/informationforhouseholdsandindividuals/householdandindividualsurveys/labourforcesurveylfs

[3] For a more detailed explanation of the qualifications included in each definition, please see the Methodology Note published on the gov.uk website

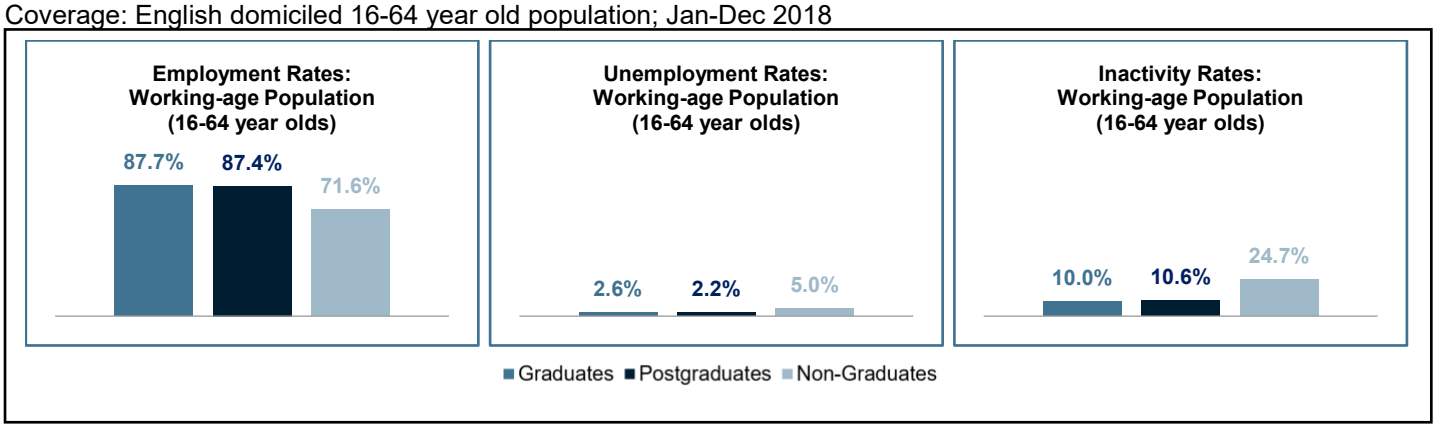
2. Headline Outcomes

This section presents the 2018 employment rates, unemployment rates, inactivity rates, high-skilled employment rates and median salaries for graduates, postgraduates and non-graduates. These headline statistics are provided for two age cohorts: the working-age population (16-64 year olds) and the young population (21-30 year olds).

Employment outcomes

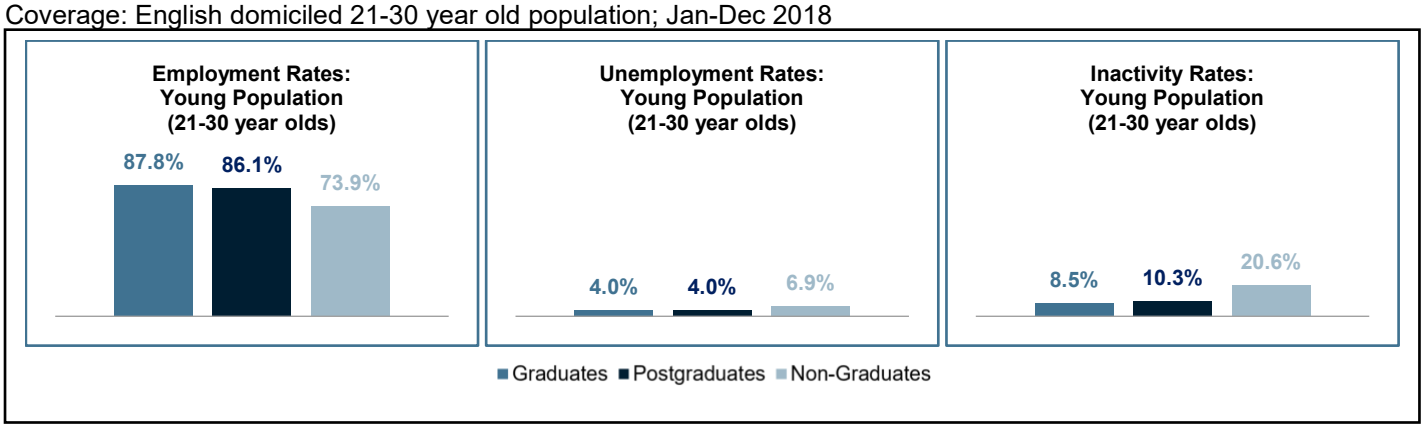
Figures 1 and 2 show the percentage of working-age and young graduates, postgraduates and non-graduates[4] that are defined as employed, unemployed[5] and inactive in the calendar year 2018.

Figure 1: Employment, unemployment and inactivity rates of the working-age population
Coverage: English domiciled 16-64 year old population; Jan-Dec 2018



Source: Department for Education analysis of the Labour Force Survey

Figure 2: Employment, unemployment and inactivity rates of the young population
Coverage: English domiciled 21-30 year old population; Jan-Dec 2018



Source: Department for Education analysis of the Labour Force Survey

Working-age graduates had a higher employment rate and a lower inactivity rate than working-age postgraduates and non-graduates in 2018. At 2.2%, the unemployment rate of postgraduates (2.2%) was the lowest of the three groups and less than half that of non-graduates (5.0%).

Amongst the young population, graduates performed best across the three labour market measures presented in figure 2; as with the working-age cohort, young graduates had both the highest employment rate and lowest inactivity rate. In contrast, young non-graduates fared worst across all three indicators. The

[4] Of note when considering the employment and inactivity rates of young non-graduates is that this cohort is likely to include a significant proportion of economically-inactive students.
[5] Unemployment is defined under the International Labour Organization (ILO) measure, which assesses the number of jobless individuals available to, and actively seeking, work.

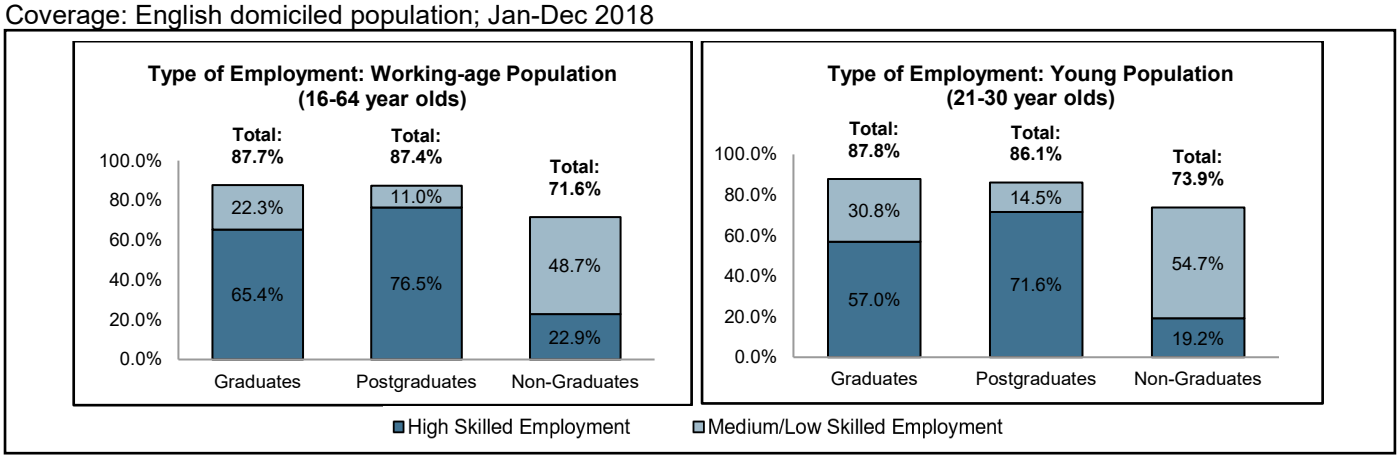
inactivity rate of young non-graduates, 20.6%, was more than double the rates of young graduates (8.5%) and postgraduates (10.3%).

Comparing the two age cohorts, employment rates were similar for the working-age and young populations. Across all qualification categories 21-30 year olds were more active in the labour market but had higher unemployment rates than the working-age population, indicating a relative difficulty with finding employment for those that sought it.

High-skilled employment rates

Figure 3 shows, for graduates, postgraduates and non-graduates, the share of employed individuals in high-skilled[6] and medium/low-skilled jobs[7].

Figure 3: High-skilled employment rates of the working-age and young population[8]
Coverage: English domiciled population; Jan-Dec 2018



Source: Department for Education analysis of the Labour Force Survey

Within both age cohorts, non-graduates had by far the lowest proportion of employed individuals in high-skilled roles (22.9% and 19.2% for the working-age and young populations respectively). Although graduates and postgraduates had similar employment rates overall in 2018, a much larger share of postgraduates were in high-skilled employment; for both working-age and young individuals, the medium/low-skill employment rate of graduates was twice that of postgraduates.

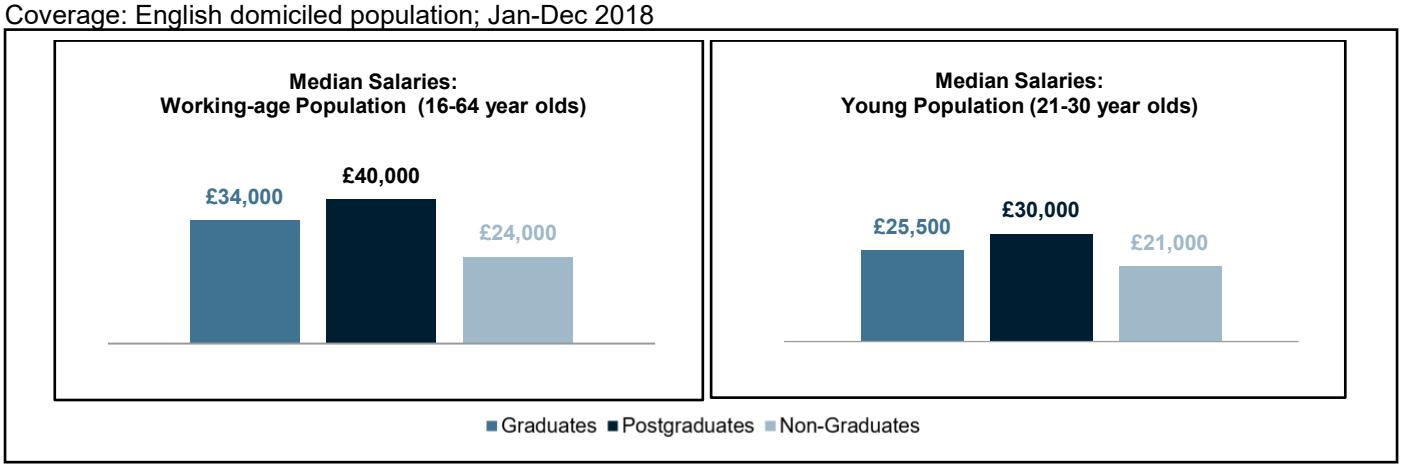
Across all qualification types, individuals in the working-age population had higher high-skilled employment rates than those in the young population. This may provide some evidence for graduates, postgraduates and non-graduates 'upskilling' as they acquire increasing amounts of labour market experience. It could also, however, reflect the limited number of high-skilled employment opportunities available to younger individuals and the potential difficulties they face matching into relevant jobs early in their careers.

Median Salaries[9]

Figure 4 presents the 2018 median salaries for graduates, postgraduates and non-graduates the working-age and young populations.

[6] High-skilled jobs are defined as Standard Occupation Classification (SOC) codes 1-3. SOC 1-3 include: managers, directors and senior officials; professional occupations and associate professional and technical occupations.
[7] Medium or low skilled jobs are defined in this publication as Standard Occupation Classification (SOC) codes 4-9. SOC 4-9 include: administrative and secretarial occupations; skilled trades' occupations; caring, leisure and other service occupations; sales and customer service occupations; process, plant and machine operatives and elementary occupations.
[8] The high-skilled employment rate and the medium/low skilled employment rate may not add up to the employment rate exactly due to rounding.
[9] Median salaries throughout this publication are given in nominal terms, so do not account for inflation. They are only given for those in full-time work, so exclude part-time workers. In addition, they are rounded to the nearest £500 in line with statistics from the Destinations of Leavers from Higher Education surveys.

Figure 4: Median salaries of the working-age and young population
Coverage: English domiciled population; Jan-Dec 2018



Source: Department for Education analysis of the Labour Force Survey

The median postgraduate salary exceeded that of graduates and non-graduates for both age cohorts. Within the working-age population, postgraduates earned £6,000 more than graduates and £16,000 more than non-graduates; for the young population, the difference was £4,500 and £9,000 respectively.

Benefitting from greater labour market experience on average, working-age individuals had a higher median salary than those aged 21-30 across all qualification types. The largest differential between cohorts was for postgraduates, where the working-age population earned £10,000 more than the young population (£40,000 and £30,000 respectively). Where postgraduates are more likely to enter the labour market later than graduates and non-graduates, this gap provides some indication that, once employed, they progress more quickly than those holding alternative qualifications. Analogously, the salary differential between working-age and young non-graduates, the smallest across qualification types at £3,000, suggests progression is relatively more difficult for these individuals.

3. Year-on-Year Changes

Table 1 shows how the headline statistics changed between 2017 and 2018.

Table 1: Headline statistics and year-on-year changes[10]
Coverage: English domiciled population; 2017 and 2018

Working Age Population (16-64)	Employment Rate	Y/Y	High-Skilled Employment Rate	Y/Y	Unemployment Rate	Y/Y	Median Salary	Y/Y
Graduates	87.7%	+ 0.3 ppts	65.4%	- 0.1 ppts	2.6%	- 0.2 ppts	£34,000	+ £1000
Postgraduates	87.4%	- 0.3 ppts	76.5%	- 1.3 ppts	2.2%	- 0.2 ppts	£40,000	+ £1000
Non-graduates	71.6%	+ 0.5 ppts	22.9%	+ 0.7 ppts	5.0%	- 0.3 ppts	£24,000	+ £1000

Young Population (21-30)	Employment Rate	Y/Y	High-Skilled Employment Rate	Y/Y	Unemployment Rate	Y/Y	Median Salary	Y/Y
Graduates	87.8%	- 0.9 ppts	57.0%	- 0.8 ppts	4.0%	No change	£25,500	+ £500
Postgraduates	86.1%	- 2.2 ppts	71.6%	- 2.3 ppts	4.0%	- 0.5 ppts	£30,000	+ £2000
Non-graduates	73.9%	- 0.7 ppts	19.2%	+ 1.4 ppts	6.9%	+ 0.2 ppts	£21,000	+ £1500

Source: Department for Education analysis of the Labour Force Survey

Compared with 2017, 2018 outcomes across the working-age population were mixed. The Employment rates of graduates and non-graduates rose by 0.3 and 0.5 percentage points respectively. For non-graduates this was accompanied by an increase in the share of those employed in high-skilled roles, rising

[10] The year-on-year changes outlined in Table 1 may not total the difference between annual data reported within this document exactly due to rounding.

0.7 percentage points to 22.9%. Postgraduates saw both the employment rate and the proportion in high skilled employment fall, by 0.3 and 1.3 percentage points respectively.

Across the young population employment rates fell for all qualification types between 2017 and 2018, with the largest fall of 2.2 percentage points experienced by postgraduates (88.3% to 86.1%). As with the working-age population, high-skilled employment rates for 21-30 year olds only rose for non-graduates, by 1.4 percentage points to 19.2%. The only fall in unemployment rates in this cohort was for postgraduates (0.5 percentage points to 4.0%), a contrast to the working-age population where rates fell across graduates, postgraduates and non-graduates.

Median earnings in 2018 compared favourably to 2017 across all groups. The largest nominal increase was for young postgraduates where the median salary rose by £2,000 to £30,000. Median salaries rose by £1,000 across the working-age population to £34,000, £40,000 and £24,000 for graduates, postgraduates and non-graduates respectively.

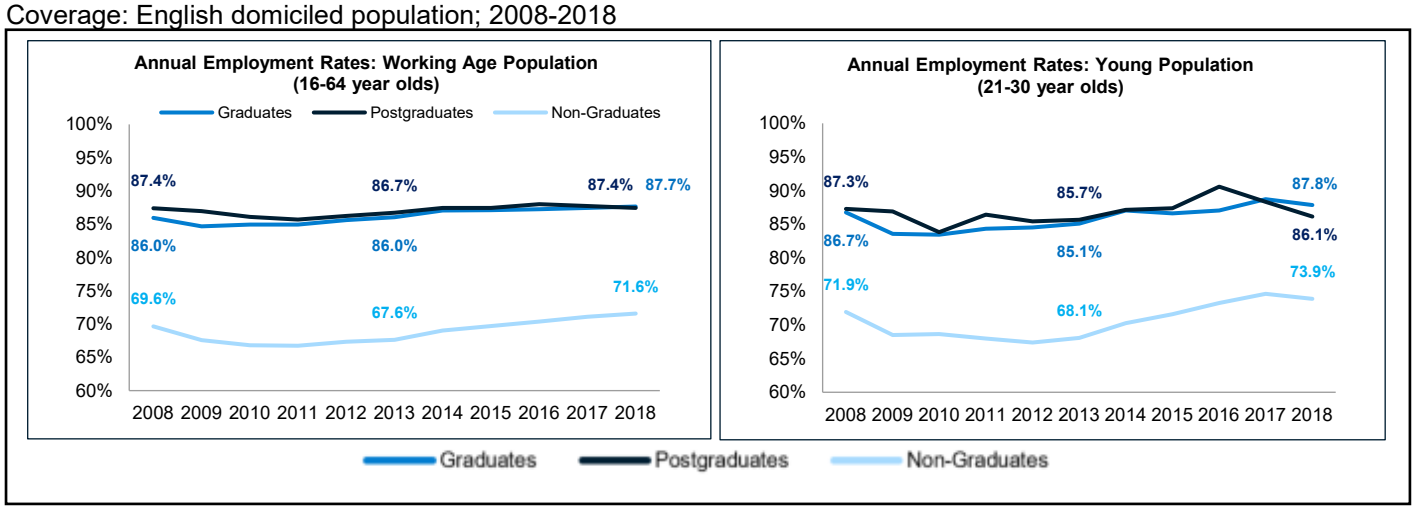
4. Time Series Data (2008-2018)

This section outlines how employment rates, high-skilled employment rates, unemployment rates and median salaries have changed over the past 10 years for the working-age and young populations. In the below graphs, figures for the years 2008, 2013 and 2018 have been provided to more clearly highlight points of reference. The full time series, including all figures from 2006-2018 can be found in the supporting data published on the gov.uk website.

Time Series: Employment Rates

Figure 5: Time series data – Annual employment rates

Coverage: English domiciled population; 2008-2018



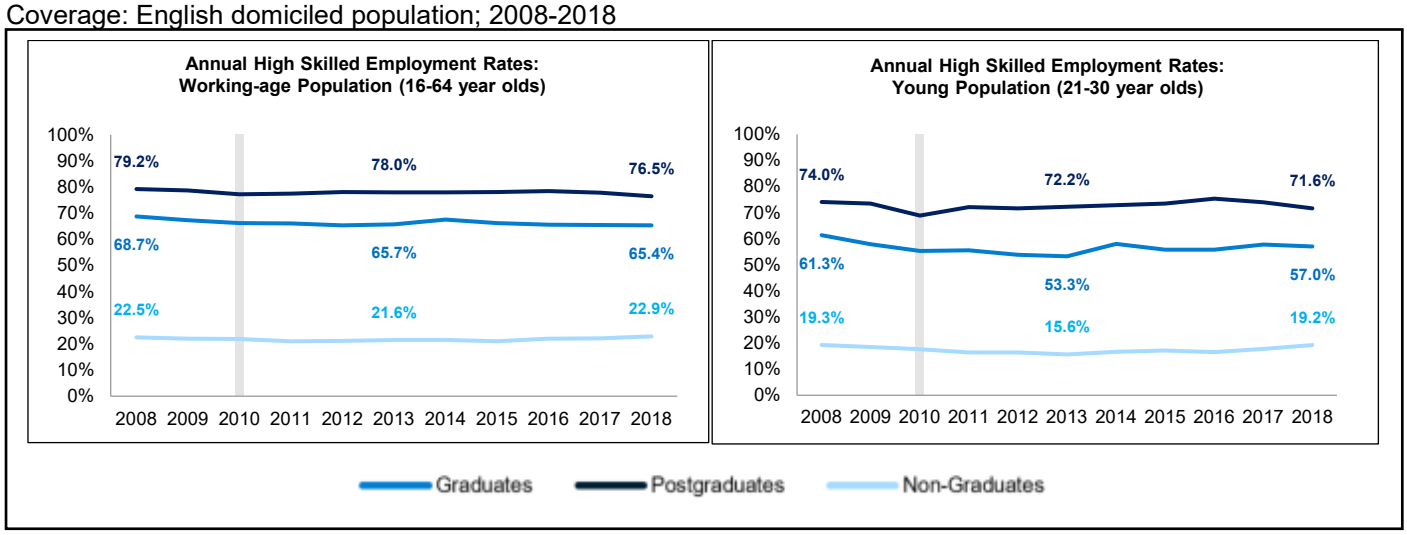
Source: Department for Education analysis of the Labour Force Survey

Over the past decade employment rates for the working-age population have steadily climbed following the recession, with 2018 figures relatively consistent with previous years' trends. Whilst employment rates for the young population over this period have been more volatile, the 2018 fall for graduates and non-graduates was against recent trends; graduate employment rates had previously rose since 2015, whilst non-graduate employment rates had been rising since 2012. The rate for postgraduates across both age cohorts fell in 2018 for the second consecutive year.

Time Series: High-skilled Employment Rates

Figure 6: Time series data - Annual high-skilled employment rates[11]

Coverage: English domiciled population; 2008-2018



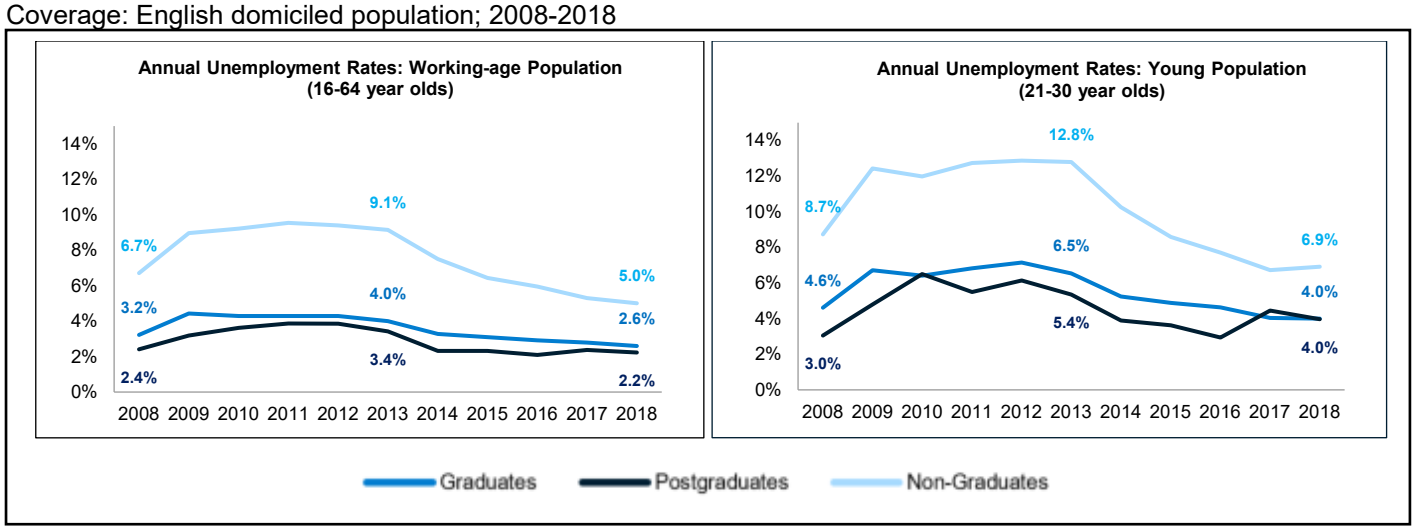
Source: Department for Education analysis of the Labour Force Survey

Although high-skilled employment rates have been relatively stable across both population cohorts over the past decade, only working-age non-graduates have higher rates now than in 2008 (22.9% compared with 22.5%). The largest fall over this period has been for young graduates whose high-skilled employment rate has fallen by 4.3 percentage points to 57.0%, despite an overall rise since 2013. Whilst caution should be exercised in making comparisons to years prior to the 2010-2011 break in the series, this fall provides some indication that since 2008 young graduates have increasingly found employment in medium/low-skill roles, potentially due to the absence of high-skill opportunities.

Time Series: Unemployment Rates

Figure 7: Time series data – annual unemployment rates

Coverage: English domiciled population; 2008-2018



Source: Department for Education analysis of the Labour Force Survey

Across all qualification types in the working-age population, unemployment rates in 2018 continued a downwards trend that has largely been a feature since the post-recession rises. For postgraduates, the 2018 fall represented a return to trend following the first unemployment rate rise since 2011 in 2017.

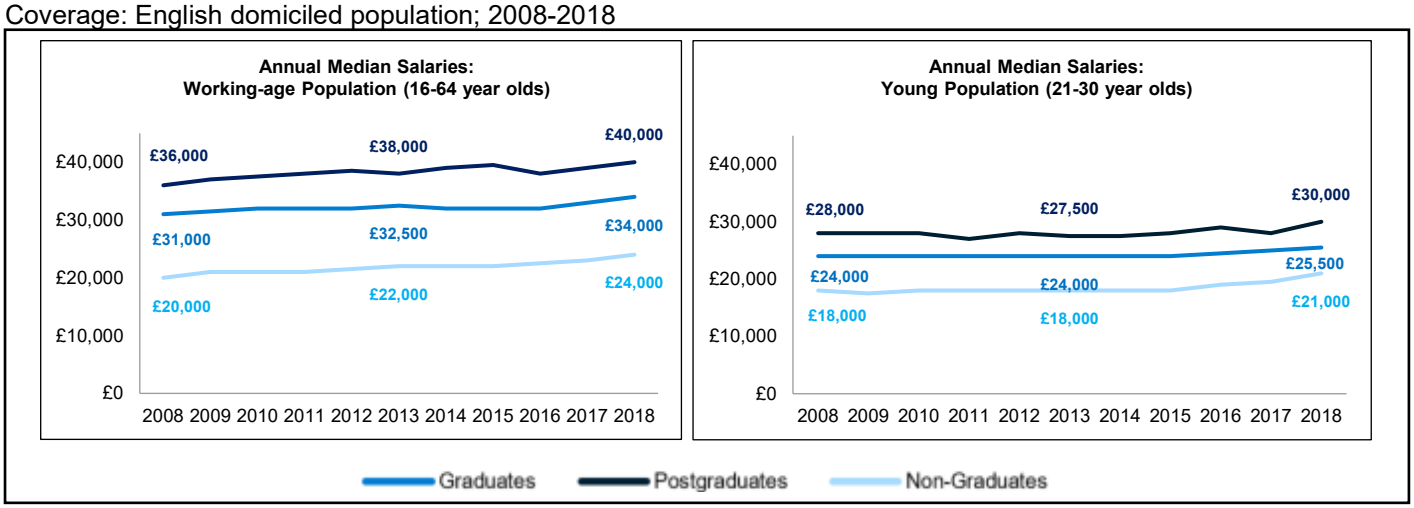
[11] The vertical lines in the two graphs in this figure represent a structural break in the time series when the SOC codes were revised by the ONS. Therefore, any comparisons between data before and after this break should be treated with caution. More information can be found on the ONS website at the following address: https://www.ons.gov.uk/methodology/classificationsandstandards/standardoccupationalclassificationsoc/soc2010

For the young cohort, 2018 figures were more mixed across qualification groups. Graduate unemployment remained at 4.0%, a fall of 3.1 percentage points since 2012. Whilst the postgraduate rate fell to 4.0%, it still remained above 2016's 10-year low of 2.9%. The 0.2 percentage point rise in the non-graduate unemployment rate in 2018 was marginal in the context of the rate's 3.0 percentage point fall since 2012.

Time Series: Median Salaries

Figure 8: Time series data – annual median salaries

Coverage: English domiciled population; 2008-2018



Source: Department for Education analysis of the Labour Force Survey

The 2018 rise in nominal median salaries across all groups continued a recent upwards trend – in 2017, salaries also rose for all groups except young postgraduates.

Similar positive trends in median salaries since 2008 for all qualification types, across both population cohorts, suggests that the nominal earnings growth of graduates and postgraduates over this period has not come at the expense of non-graduate salary growth. These nominal rises do not, however, account for inflation and therefore do not reflect changes in individuals' purchasing power over this period.

4. Gender Breakdowns

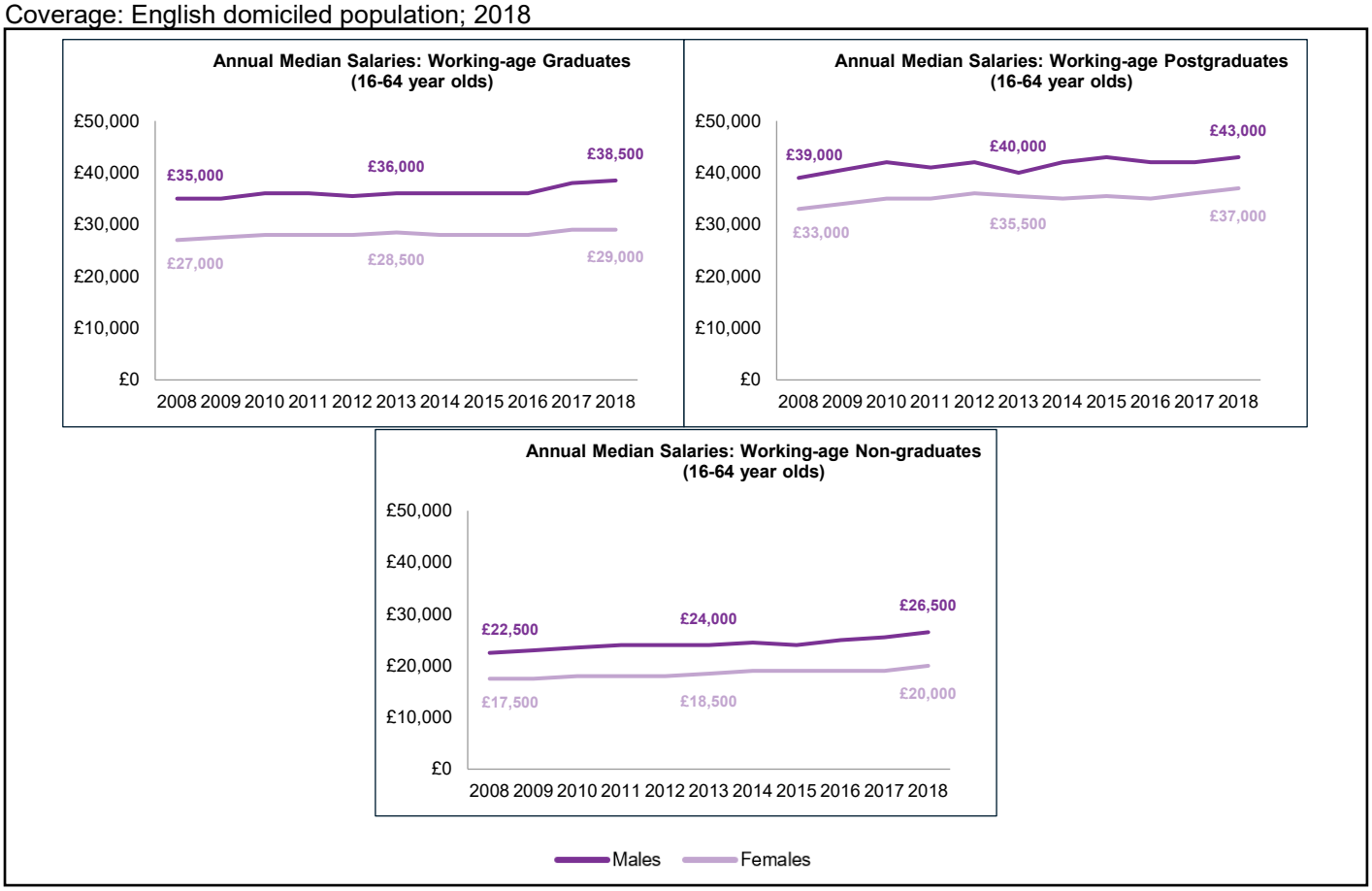
This section provides gender breakdowns of median salaries.

A number of further breakdowns by individual characteristic can be found in the data tables, and include: age group, ethnicity, disability status, degree class, subject group, occupation, sector of employment and region.

Gender Breakdowns: Median Salaries

Figure 9: Median salaries of working-age population by gender

Coverage: English domiciled population; 2018



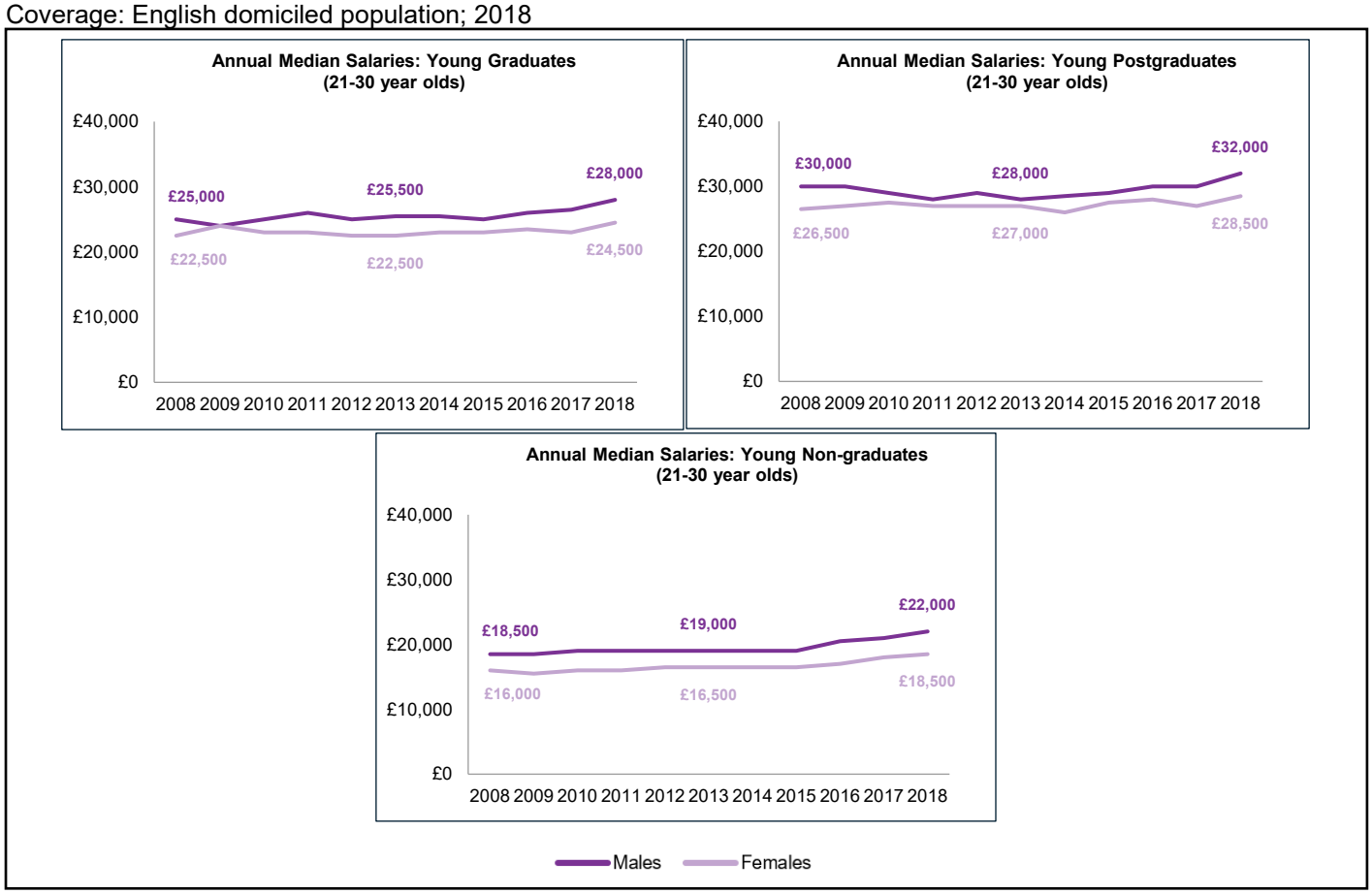
Source: Department for Education analysis of the Labour Force Survey

Within the working-age population in 2018, males across all qualification groups had higher median salaries than their female counterparts. The difference was most pronounced for graduates, where males earned £9,500 more than females, and was smallest between non-graduates at £6,500. The gaps between males and females, however, may to some extent reflect differences in working patterns between the two genders.

Over the time series both males and females across qualification groups have experienced nominal salary growth, albeit not necessarily at constant rates. Whilst the growth rate of male and female non-graduates has been similar (therefore maintaining a relatively constant earnings gap), for graduates the faster salary growth rate of males in recent years has resulted in a divergence from graduate females of £1,500 since 2016.

Figure 10: Median salaries of the young population by gender

Coverage: English domiciled population; 2018



Source: Department for Education analysis of the Labour Force Survey

As with the working-age cohort, postgraduate males were the highest earning group within the young population in 2018, whilst females earned less than males across all qualification groups. The differences between genders were, however, smaller than for the working-age population, both nominally and as a percentage of female earnings; young graduate, postgraduate and non-graduate males each earned £3,500 more than young females of the same qualification group.

Over recent years, non-graduates have fared relatively well; male and female salaries have risen £3,000 and £2,000 respectively since 2015. For graduates and postgraduates, outcomes were more mixed; whilst both graduate and postgraduate males have benefitted from median salary increases of £3,000 since 2015, graduate and postgraduate females recovered in 2018 from salary falls in 2017.

Gender Breakdowns: Median Salaries by Industry

Figure 11: Median salaries of working-age and young graduates by gender and industry of employment[12]

Coverage: English domiciled population; 2018

Source: Department for Education analysis of the Labour Force Survey

Across industries, those in the working-age population had higher median salaries than those in the young population. Males employed in transport and communication had the highest working-age median salary (£45,000), which was also true for the young population (alongside manufacturing at £30,000). For both cohorts, females employed in distribution, hotels and restaurants had the lowest salaries, at £22,000 and £20,000 for the working-age and young populations respectively.

Across all industries, for both age cohorts, males had higher median salaries than females in 2018. The gap was largest for working-age graduates in the manufacturing sector, at £12,000. It was smallest for young graduates in the distribution, hotels and restaurants sector, at £1,500. This provides some evidence that gender pay differences widen on average with increasing amounts of labour market experience in higher-paying industries.

5. Accompanying tables

The following tables are available in Excel format on the department's statistics website

National & Regional tables

1 Graduate labour market statistics: 2018: supporting data

[12] Construction salary data for working-age female graduates, young male graduates and young female graduates is not available due to insufficient sample sizes.

6. Further information is available

Within the supporting data we have provided a more detailed focus on the employment and earnings outcomes of graduates by their specific characteristics[13]. The breakdowns included in this dataset include:

- Age group
- Gender
- Ethnicity
- Disability status
- Degree class
- Subject group
- Occupation
- Sector
- Region

These have been provided for the working-age (16-64 years old) and young (21-30 years old) graduate populations.

7. Official Statistics

These are Official Statistics and have been produced in line with the Code of Practice for Official Statistics.

This can be broadly interpreted to mean that the statistics:

- meet identified user needs;
- are well explained and readily accessible;
- are produced according to sound methods, and
- are managed impartially and objectively in the public interest.

Once statistics have been designated as Official Statistics it is a statutory requirement that the Code of Practice shall continue to be observed.

The Department has a set of statistical policies in line with the Code of Practice for Official Statistics.

8. Technical information

A quality and methodology information document accompanies this publication. This provides further information on the data sources, their coverage and quality and explains the methodology used in producing the data, including how it is validated and processed.

[13] Please note that all postgraduates and some graduate groups are out of scope for this part of the publication due to smaller sample sizes preventing robust analysis. In addition, non-graduates are out of scope for this part of the publication given the focus of the GLMS on those who have gained higher education qualifications.

9. Get in touch

Media enquiries

Press Office News Desk, Department for Education, Sanctuary Buildings, Great Smith Street, London SW1P 3BT.

Tel: 020 7783 8300

Other enquiries/feedback

Thomas Warren, Higher Education Analysis

Address: Department for Education, Sanctuary Buildings, London, SW1P 3BT.

Email: thomas.warren@education.gov.uk

Department for Education

© Crown copyright 2019

This publication (not including logos) is licensed under the terms of the Open Government Licence v3.0 except where otherwise stated. Where we have identified any third party copyright information you will need to obtain permission from the copyright holders concerned.

To view this licence:

visit www.nationalarchives.gov.uk/doc/open-government-licence/version/3

email psi@nationalarchives.gsi.gov.uk

write to Information Policy Team, The National Archives, Kew, London, TW9 4DU

About this publication:

enquiries Thomas Warren, Higher Education Analysis, Department for Education, Sanctuary Buildings, London, SW1P 3BT. Email: thomas.warren@education.gov.uk

Reference: DFE-00085-2019

Follow us on Twitter: @educationgovuk

Like us on Facebook: facebook.com/educationgovuk